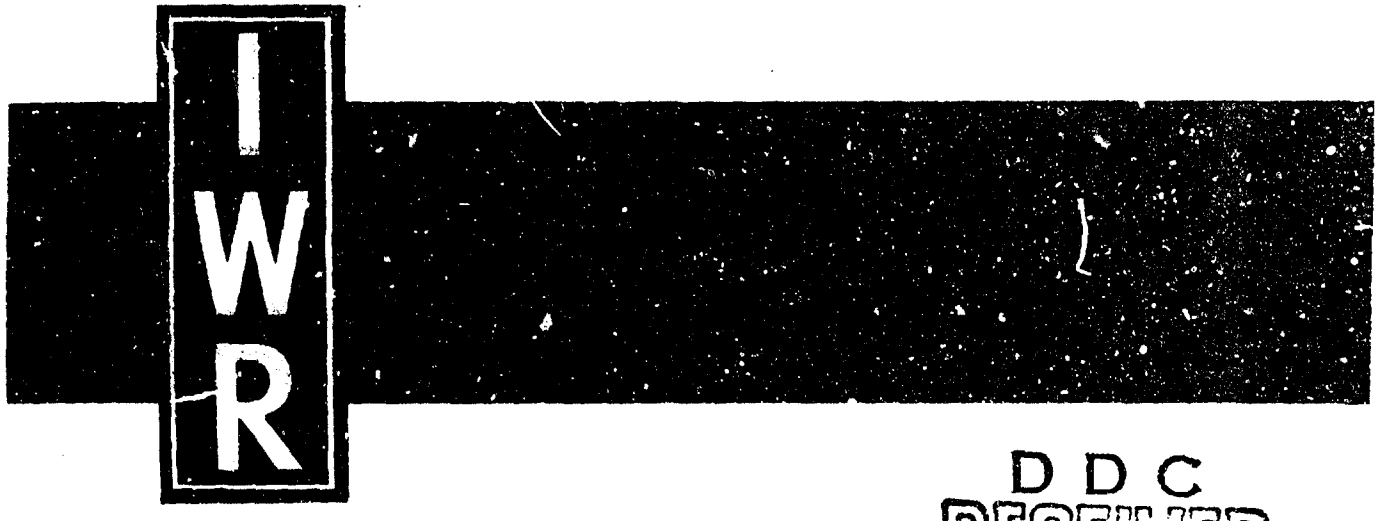
ER 1165-2-500
APPENDIX A
30 NOVEMBER 1970

ENVIRONMENTAL GUIDELINES for the Civil Works Program of the Corps of Engineers



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

November 1970

IWR REPORT 70-5

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DEPARTMENT OF THE ARMY
Office of the Chief of Engineers
Washington, D. C. 20314

ER 1165-2-500

ENGCW-C

30 November 1970

Regulation
No. 1165-2-500

WATER RESOURCE POLICIES AND AUTHORITIES
Environmental Guidelines for the Civil Works Program
of the Corps of Engineers

1. Purpose. This regulation provides in the attached Appendix policy guidance of the Chief of Engineers on incorporating environmental considerations in investigating and developing water and related land resources.

2. Applicability. This regulation applies to all echelons of the Corps of Engineers concerned with Civil Works responsibilities.

FOR THE CHIEF OF ENGINEERS:

Richard F. McAdoo

RICHARD F. McADOO
Colonel, Corps of Engineers
Executive

1 Appendix
Environmental Guidelines

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314

IN REPLY REFER TO

ENGCW 23 November 1970

SUBJECT: Environmental Guidelines for the Civil Works Program

Division Engineers, except Huntsville and Mediterranean
District Engineers, except Canaveral, Okinawa, Saudi Arabia, and Far East

1. In my letter to you of 2 June 1970 in which I stated my policy on the environmental aspects of our mission, I stated that a document discussing the policy in more detail was under preparation. This document, "Environmental Guidelines for the Civil Works Program of the Corps of Engineers," was developed by our Institute for Water Resources. It extends my policy in the form of guidelines for the Civil Works program, and I am pleased to accept and adopt it.

2. All previous directives, instructions and guidance which conflict with these guidelines will be brought into conformity with them. All future directives, instructions, guidance and actions will conform to them.

F. J. CLARKE
Lieutenant General, USA
Chief of Engineers

DEPARTMENT OF THE ARMY
INSTITUTE FOR WATER RESOURCES, CORPS OF ENGINEERS
[illegible] NORTH WASHINGTON STREET
ALEXANDRIA, VIRGINIA 22314

IWRDR 19 November 1970

SUBJECT: Environmental Guidelines for the Civil Works Program of the Corps of Engineers

Chief of Engineers

1. The Institute for Water Resources has prepared environmental guidelines for the Civil Works program of the Corps of Engineers, as you requested. I am pleased to forward them herewith.

2. These guidelines reflect the comments of your Environmental Advisory Board, of your field offices, and of members of your staff. They take cognizance of the substantial number of circulars and regulations that have been developed and promulgated by the Corps to date in response to the Environmental Policy Act of 1969.

3. This document has been written to emphasize the redirection of Corps' policy stated in your letter to the Division Engineers, 2 June 1970. It is intended to provide guidance to those who prepare environmentally related directives and assistance to those who must interpret them.

R. H. GROVES
Brigadier General, USA
Director

ENVIRONMENTAL GUIDELINES

FOR THE

CIVIL WORKS PROGRAM

OF THE

CORPS OF ENGINEERS

November 1970

Environmental Guidelines
for the
Civil Works Program
of the
Corps of Engineers

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THE NEED FOR REDIRECTION

Although extensive, our natural environment and the resources it contains are finite. When our Nation was young, the demands the American people placed on nature appeared negligible in comparison with the quantities of resources available for them to use. But our population, once small, is now large and is still growing. At the same time our material standard of living is steadily rising. We live in a period of ever-increasing demands for natural resources on one hand, and of ever-diminishing supplies on the other. It is clear that there is a limit to the burden our natural environment can bear, and that we must conserve our resources and use them wisely.

Only recently have many people come to realize that growing demands for resource consumption pose serious threats to their environment; that man's environment is composed of interdependent systems both natural and man-made; and that abuse of one system jeopardizes the quality of the others and ultimately the survival of all.

Traditionally Americans have sought economic growth and development. To that end, the Corps of Engineers has planned,

designed, and constructed many projects to control and facilitate the use of water resources by the American people whom we serve.

Today, we in the Corps face an apparent dilemma. We are still called upon to meet increasing demands for resources to support a higher standard of living for more Americans. And now we are also being called upon to conserve those same resources in order to preserve the quality of the natural environment in which our people live.

But these apparently conflicting demands need not be mutually exclusive. There are many means available to us for accomplishing both. We can continue to serve the American people effectively and economically and at the same time meet the requirements of a quality environment.

Reconciling the demands for development and utilization with those for conservation calls for reorienting our previous policy that was primarily concerned with national economic efficiency. We must give environmental values the full consideration that is their due.

THE CHIEF OF ENGINEERS' ENVIRONMENTAL ADVISORY BOARD

To ensure that environmental aspects of Corps' projects are adequately considered, the Chief of Engineers has sought outside

expert advice. On April 2, 1970 he formed an Environmental Advisory Board, composed of six outstanding authorities on environmental matters, and asked them to:

a. Examine existing and proposed policies, programs and activities from an environmental point of view to identify problems and weaknesses and suggest how these can be remedied.

b. Advise on how the Corps can improve working relations with the conservation community and the general public.

c. Advise on environmental problems or issues pertinent to specific plans or programs.

d. View their responsibilities within the context of the present and the future, rather than dwelling on past problems.

CORPS OF ENGINEERS' POLICY

Subsequently, on June 2, 1970, the Chief of Engineers announced his policy with respect to the environmental aspects of the Corps' mission:

--In full consonance with the National Environmental Policy Act of 1969, the Environmental Quality Improvement Act of 1970 and other environmental authorities promulgated by the Congress and the Executive Branch, our

overall objective in accordance with our mission will be to seek to balance the environmental and developmental needs of our Nation.

--We will examine carefully environmental values when studying alternative means of meeting the competing demands of human needs.

--Best solutions must be found to problems meeting needs and aspirations of the people we serve, not merely determination of whether a specific engineering solution is economically justified.

--In recognition of the highly complex relationship between nature and man, we will encourage and support efforts to bring the best existing ecological knowledge and insights to bear on the planning, development and management of the Nation's water and related resources.

--Environmental values will be given full consideration along with economic, social and technical factors.

--Special efforts will be made so that resource options will be kept open for future generations.

--We will encourage as broad public and private participation as practical in defining environmental objectives and in eliciting viewpoints of what the public wants and expects as well as what it is projected to need.

--Acting as moderators and advisors, we will provide governmental and nongovernmental agencies and the public with timely information on opportunities, consequences, benefits and costs--financial and environmental--before making recommendations based on a balanced evaluation of the social, economic, monetary and environmental considerations involved.

OBJECTIVES

Implicit in this policy are four general environmental objectives for the Corps:

a. To preserve unique and important ecological, aesthetic, and cultural values of our national heritage.

b. To conserve and use wisely the natural resources of our Nation for the benefit of present and future generations.

c. To enhance, maintain, and restore the natural and man-made environment in terms of its productivity, variety, spaciousness, beauty, and other measures of quality.

d. To create new opportunities for the American people to use and enjoy their environment.

GUIDELINES

Our objectives can be translated into guidelines governing the Corps of Engineers' Civil Works program.

The Corps and the Public. As a public agency the Corps responds to the public interest. That interest synthesizes many needs, desires and aspirations. It finds expression in the views of individuals and groups and their representatives at local, State and Federal levels of government. We in the Corps of Engineers have an obligation to receive these views, to know what they are and to accommodate them insofar as possible. We are equally obligated to provide information to those who express these views, so that they can understand our activities and responsibilities.

Our relationship with the American public requires a continuing dialog; without it, we cannot know the public interest. Without such knowledge, the projects that we build are not likely to serve that interest.

To ensure that we do respond to the public interest, we must seek out its expressions. This is not merely a matter of meeting others half-way; we must do whatever is necessary to obtain the wide range of views which make up the public interest. These often divergent views must be injected into every aspect of our work. They must be introduced during the earliest stage of our consideration of a project and reconsidered at every subsequent stage.

Among the most important of the views that we must obtain and consider are those concerned with environmental values. Altogether too often the environmental viewpoint has not crystallized until a project was under construction. This is not good for those concerned with the environment--their intentions are not realized; it is not good for the Corps--we do not achieve our objectives; it is not good for the American people--their best interests are not served. For these reasons we must take positive measures to insure that considerations of all elements of the public interest, including the environmental viewpoint, are introduced into each phase of our programs.

Planning. The initiation of a study does not preordain a project; it is a systematic analysis of problems and their possible

solutions for the purpose of determining the best overall solution. Throughout the planning phase the following guidelines will be applied:

a. Specify what problems must be solved.

b. Identify and list features or conditions which should be enhanced, protected, preserved, restored, or developed only with great care.

c. Formulate a wide range of structural and nonstructural alternatives to solve the specified problems.

d. Obtain and accommodate the views of interested individuals and of Federal, State, and local government agencies throughout the planning process, including the formulation of alternatives.

e. Analyze and evaluate the environmental effects of each alternative.

f. In the event that any alternative has a detrimental net effect upon the environment, seek means for modifying it to ameliorate its environmental effects.

g. Select and recommend the optimum solutions considering all pertinent factors.

h. Prepare a preliminary 5-point environmental impact statement, as required by the Environmental Policy Act of 1969, early in the investigation and keep it current.

i. Develop the overall concept for the operation and use of the project (the project master plan) concurrently with all other planning activities.

Design. After a project is authorized, more detailed planning and engineering must be accomplished before it can be constructed. The following guidelines apply to this phase:

a. Reevaluate the findings, conclusions, and recommendations developed during the preauthorization planning (including authorization recommendations) in the light of current environmental objectives and programs.

b. Consult with other governmental agencies and the public, keeping them fully and continuously informed of progress, obtaining, considering and utilizing their ideas, views, and recommendations.

c. Integrate specific ecological and environmental considerations into the planning and design of all project features to insure that qualitative values associated with the project are enhanced, preserved, or maintained.

d. Mitigate unavoidable disruptions.

e. Make the project as aesthetically pleasing as possible, seeking to harmonize its features with the surrounding natural environment.

f. Review and keep current the 5-point environmental impact statement.

g. Review and revise, as appropriate, the project master plan.

Construction. Once design is complete, construction may begin, subject to the following guidelines:

a. Ensure that plant layout, locations of construction roads and living areas minimize damage to the natural environment.

b. Prevent unnecessary destruction of vegetation, construction scars and other disruptions of the site.

c. Control and minimize harmful effects of dredged material and solid waste disposal, turbidity, and other kinds of water pollution, and noise and air pollution.

d. Maintain with the public dialog to assess and reduce the impact of construction operations.

e. Restore construction sites to as near their natural or other desirable condition as possible.

f. Review and keep current the 5-point environmental impact statement.

Operation. After a project is built and put into use, the following guidelines will apply:

a. Manage the project to maximize its environmental quality consistent with its purposes and available funds.

b. Maintain and, to the fullest extent possible, enhance aesthetic and cultural values of the project and of adjacent areas.

c. Periodically review and update the project master plan and operating and management regulations, considering changes in public response and use and forces and conditions affecting environmental quality both within and outside the project area.

d. Prevent or minimize air, water, and solid waste pollution and other adverse effects associated with the project's operation and its use by the public, as determined through continuous monitoring.

CONCLUSION

In essence, we seek to introduce an environmental viewpoint when our projects first come under consideration and to receive

and accommodate it at every subsequent stage of their development and utilization. In achieving this end, we require the full cooperation of every employee of the Corps of Engineers, and we invite the participation of all other concerned Americans.